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**DEMOCRATIC REPUBLIC OF CONGO**

# HOW TO CONDUCT A DATA QUALITY ASSESSMENT (DQA):

## AN AID MEMOIR FOR A COR/AOR

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## ACRONYMS

|       |  |
|-------|--|
| ADS   | Automated Directive System.                        |
| COTR  | Contracting Officer's Representative               |
| DCM   | Data Collection Methodology                        |
| DTS   | Development and Training Services                  |
| DQA   | Data Quality Assessment                            |
| DO    | Development Objective                              |
| DRC   | Democratic Republic of the Congo                   |
| IP    | Implementing Partner                               |
| M&E   | Monitoring and Evaluation                          |
| PMP   | Performance Monitoring Plan                        |
| PMP   | Performance Management Plan                        |
| PIRS  | Performance Indicators Reference Sheet             |
| PPR   | Performance Plan Report                            |
| USAID | United States Agency for International Development |

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## **BACKGROUND**

The Government Performance and Results Act (GPRA) established strategic and Performance Planning and Monitoring and Evaluation requirements for all USG Agencies. In accordance with the Office of Management and Budget (OMB) guidance, USAID contributes to or prepares detailed planning and reporting documents that cover programs funded in each fiscal year.

USAID-funded projects are most often implemented through grants, cooperative agreements, or contracts. These mechanisms are built upon solid principles of partnership. Despite its strong belief in partnership, USAID values the quality of data provided by partners. To this end, USAID conducts Data Quality Assessments (DQAs) in accordance with Automated Directives System (ADS) 203 in an effort to understand and increase the quality of the data that it reports on regularly.

According to the ADS, the purpose of a DQA is to ensure that the USAID Mission and the Technical offices overseeing an activity are aware of the strengths, weaknesses, and limitations of their performance data as well as the extent to which the data can be trusted to influence management decisions. A DQA of each selected performance indicator helps validate the usefulness and integrity of the data.

The ADS mandates that “Data reported to USAID/Washington for GPRA reporting purposes or for reporting externally on Agency performance must have a data quality assessment at some time within the three years before submission.” (ADS 203.3.5.2) Through a DQA, Missions should ensure that the data being reported are measured against five data quality standards: validity, integrity, precision, reliability and timeliness (abbreviated V-I-P-R-T).

The ADS requires Missions to: 1) review data collection, maintenance, and processing procedures to ensure that procedures are consistently applied and continue to be adequate; 2) identify areas for improvement, if possible; and 3) retain documentation of the DQA in their performance management files and update the information within three years.

The DQA is also an opportunity for building capacities, and improving reporting quality. Thus, the DQA helps end-users of USAID data to know strengths and limitations of the data on which their programs report.

## **FIRST PART: ESSENCE OF DQA**

### **WHAT’S THE DATA QUALITY ASSESSMENT?**

The ADS does not prescribe a specific way to conduct a data quality assessment. There are a variety of approaches that can be used. Documentation may be as simple as a memo to the files or it could take the form of a formal Data Quality Assessment (DQA) report. The most appropriate approach will reflect a number of considerations such as management need; the type of data collected, the data source, the importance of the data, or suspected data quality issues. The key is to document the findings-- whether formal or informal.

A DQA focuses on applying the data quality criteria and examining the systems and approaches for collecting data to determine whether they are likely to produce high quality data over time. In other words, if the data quality criteria are met and the data collection methodology is well designed, then it is likely that good quality data will result.

This “systematic approach” is valuable because it assesses a broader set of issues that are likely to ensure data quality over time (as opposed to whether one specific number is accurate or not). For example, it is possible to report a number correctly, but that number may not be valid.

As mentioned above, the purpose of a DQA is to assess the data management systems of USAID’s Implementing Partners (IPs), by analyzing program indicators using data quality standards of validity, integrity, precision, reliability, and timeliness (V-I-P-R-T). These five standards are defined below in Table 1. A DQA assesses the quality of data and information an IP submits by analyzing the process used to collect, store, and transmit data to USAID/DRC. It highlights strengths and weaknesses of partners’ primary and secondary data and provides recommendations for improving the data management system of the IP. In sum, a DQA:

- Assesses the quality of data submitted by these IPs in relation to the V-I-P-R-T data quality standards.
- Assesses the system that the IP uses to collect and analyze data.
- Assesses the management information system the partner uses to record, maintain, and report data.
- Identifies areas of potential vulnerability that affect the general credibility and usefulness of the data.
- Recommends measures to address any identified weaknesses in the data submitted by the IP and in the M&E procedures and systems in place at the partner’s level.

**Table 1: DQA STANDARDS**

| STANDARD    | DEFINITION   |
|-------------|--|
| Validity    | Data should clearly and adequately represent the intended results. While proxy data may be used, the Mission must consider how well the data measure the intended result. Another issue is whether data reflect bias, such as interviewer bias, unrepresentative sampling, or transcription bias.  |
| Integrity   | When data are collected, analyzed, and reported, there should be mechanisms in place to reduce the possibility that they are intentionally manipulated for any reason. Data integrity is at greatest risk of being compromised during data collection and analysis.  |
| Precision   | Data should be precise enough to present a fair picture of performance and enable management decision making at the appropriate levels. One issue is whether data is at an appropriate level of detail to influence related management decisions. A second issue is whether or not the margin of error (the amount of variation normally expected from a given data collection process) is acceptable given the management decisions likely to be affected.          |
| Reliability | Data should reflect stable and consistent data collection processes and analysis methods over time. The key issue is whether analysts and managers would come to the same conclusions if the data collection and analysis process were repeated. The Mission should be confident that progress toward performance targets reflects real changes rather than variations in data collection methods. When data collection and analysis change, PMPs should be updated. |
| Timeliness  | Data should be timely enough to influence management decision making at the appropriate levels. One key issue is whether the data are available frequently enough to influence the appropriate level of management decisions. A second is whether data are current enough when they are reported.  |

## WHAT ARE THE MAINTYPES OF DQAS?

The DQA is an assessment exclusively focused on the quality of data. It is not an audit conducted on selected indicators – even though some data quality issues may sometimes question the nature of indicators selected for a given project. USAID/DRC has decided to characterize three main categories of DQAs:

1. **The Initial DQA:** is an assessment of the monitoring and evaluation systems established by the USAID COR/AOR and the IP management staff. This initial DQA will ensure that data collected through the systems set in place will be of good quality. The assessment will review: the tools to be used for collecting data, the qualifications of data collectors, the existence of sound methodologies in the organization, the number of persons or entities who will be processing the data before it reaches the headquarter's office, the security of the data, and the accessibility to data within the institution (hard copy and electronic copy protection). This DQA will also assess the risks which may affect the quality standards including Validity, Integrity, Precision, Reliability, and Timeliness.
2. **The DQA during Project implementation:** this DQA is conducted amidst the activities of the project. It takes advantage of the recommendations from the initial DQA report or the recommendations from a previous DQA report. This handbook is focused on providing guidance for conducting this type of DQA.
3. **The Data Quality Self-Assessment:** this is a self-assessment that is conducted by the IP of their data collection systems. This can be attached as an appendix to the DQA report and serves as a way to fully involve the IP in the DQA process.

## WHAT ARE THE KEY CONCEPTS RELATING TO DQAS?

1. **Data Quality Assessment:** is a review of performance indicator data against a set of data quality standards that helps the Mission determine and document "How good are the data", and provide an opportunity for capacity building of implementing partners, host government ministries, and other partners.
2. **Data Quality Standards:** there are five data quality standards: Validity, Integrity, Precision, Reliability, and Timeliness. (See Table 1 above)
3. **Primary data:** are data collected directly by USAID or another entity contracted by USAID. USAID has a high level of control over these data, and should apply all the quality standards. Also, the Mission can outsource quality assessment services from specialized experts. When the mission collects primary data on its own or through independent entities contracted by USAID for this purpose, the DQA should focus on the written procedures and training for crosschecking data. When contracting a specific organization to collect data, the Mission will ensure that the organization has the technical capacity to collect data of appropriate quality, as evidenced by the following:
  - Written procedures are in place for data collection;
  - Data are collected from year to year using consistent collection process;
  - Data are collected using methods to address and minimize sampling and non-sampling errors;
  - Data are collected by qualified personnel that are properly supervised;
  - Duplicative data is detected;
  - Safeguards are in place to prevent unauthorized changes to the data; and,
  - Source documents are maintained and readily available.

Data quality requirements should be written in a Statement of Work (SOW), Request for Proposal (RFP), or Request for Application (RFA). The Mission should also maintain communication with the implementing team to spot check that quality assurance mechanisms are being used. If this contract is centrally-managed, then the Contracting Officer Representative (COR) or Agreement Officer Representative (AOR) will establish and maintain quality control over the data collection and analysis.

4. **Secondary data:** are data collected by other sources, such as host country governments, implementing partners, or from other organizations. The range of control that USAID has over secondary data varies. For example, if USAID uses data from a survey commissioned by another donor, then there is little control over the data collection methodology. On the other hand, USAID does have more influence over data derived from implementing partners. USAID should verify whether data collected are of reasonable quality based on the five data quality standards of validity, integrity, precision, reliability, and timeliness. The Mission will focus its assessment on the apparent accuracy and consistency of the data. USAID may not always have the right to audit or investigate the quality of data in depth, depending on what is written in the agreement.

**Further actions:**

- The Mission should consider visiting a broad range of sites; the point is to assess whether reports submitted reflect accurately what occurs in the field.
  - The Mission should conduct regular meetings with other development partners to gain appreciation of how accurate the data are and how much credence can be placed in the figures cited.
  - Request the IP M&E person to provide a briefing on the data collection and analysis procedures, including procedures to reduce error.
  - Data quality assessment findings should be documented in a memo to the Program Office's file.
5. **Data Collection Methodology:** is a set of principles fully documented and applied by the IP to collect data from the field. A more comprehensive documentation on data collection methodology should be provided by the Development Objective (DO) team to each of its IPs. To this end, DO teams should share their PMP (Performance Management Plans which include Performance Indicator Reference Sheets) with their IPs.

## **PART II: HOW TO CONDUCT DQA**

### **WHAT IS THE ROLE OF THE COR/AOR IN THE DQA PROCESS?**

Conducting DQAs is the responsibility of COR/AOR. After the Performance Plan and Report, every DO team should come up with a list of indicators that should undergo a DQA during the next fiscal year. Good DQA planning helps the Mission to avoid conducting DQAs in emergency mode which can negatively impact the quality of the DQA process. CORs/AORs are strongly encouraged to conduct DQAs during

their planned site visits. This is more cost-efficient and provides room for in-depth discussion with the IP in the field. The M&E Specialist of the mission is available to support DO teams in conducting DQAs.

## **WHAT ARE THE KEY STEPS FOR CONDUCTING DQA DURING THE LIFE OF THE PROJECT?**

### **1. For Mission-Managed Projects**

When the AOR/COR is based at the Mission, she/he can proceed with following steps:

1. Gather key documents of the projects: PMP of the Development Objective team, Project Monitoring Plan, monthly or quarterly reports from the IP (especially those covering the period starting from the last date of the DQA).
2. Read and note relevant questions on indicators.
3. Visit a flagship activity of the project (or the one providing the bulk of indicators' data).
4. Meet with the IP (Project Managers and M&E staff of the IP).
5. Provide a quick debriefing of the DQA findings with the IP management team.
6. Draft the DQA report (Executive summary, Introduction, Findings, Conclusion, and Recommendations).
7. Share the draft report with the DO team, COR/AOR and with the IP for comments and formal acknowledgement of the report's findings.
8. File the DQA report in the official award files and send to the Mission's M&E Specialist for the Program Office files.

### **2. For Centrally-Managed Projects**

Centrally-funded projects are projects managed by a Washington-based COR/AOR. Therefore, any attempt to conduct a DQA should be discussed beforehand with the Washington-based COR/AOR. The Activity Manager is the one who will serve as liaison between the COR/AOR and the Implementing partner. The Activity Manager will be accountable for following actions:

#### **Administrative and Logistic Steps**

1. Draft an email to the COR/AOR stating the rationale for conducting the DQA and provide a proposed timeframe for the DQA and list of targeted indicators.
2. Share the email and its response with the Chief of Party (CoP) of the IP.
3. Gather key project documents: the PMP of the Development Objective team, Project Monitoring Plan (of the activity), monthly or quarterly reports from the IP (especially those covering the period since the previous DQA).
4. Read and document any concerns raised from the document review.

#### **Information Gathering and DQA Process**

1. Visit a flagship activity of the project (or the one providing the bulk of indicators' data).
2. Meet with M&E staff from the IP in order to understand their data collection processes and methodologies.
3. Provide a quick debriefing of the DQA findings with the IP management team.
4. Draft the DQA report (Executive summary, Introduction, Findings, Conclusion, and Recommendations).
5. Share the draft Report with the DO team, COR/AOR, and with the IP for comments and formal acknowledgement of the report's findings.



6. File the DQA report in the official award files and send to the Mission's M&E Specialist for the Program Office files.

## HOW DO YOU CONDUCT A DQA DURING A FIELD VISIT?

It is always good to conduct the DQA as a team, but if for operational reasons there are not enough resources for this, one person can conduct the DQA and report on behalf of the team. The DQA team must assess the data quality of standard indicators that the IPs report on through their activity by using the DQA Checklist for COR/AORs (Annex II) to conduct the DQA in steps as follows:

1. **Review the recommendations of a previous DQA report**
2. **Assess the data collection system and processes:**
  - Ask whether a reporting calendar covering data collection exists.
  - Check whether evidences of data quality discussions exist across the organization (memos, minutes).
  - Review the definition of the indicator along with its data collection methodology.
  - Obtain a clear picture of how data is transferred from the field to the IP's M&E desk.
  - Compare a randomly selected sample of the data provided by the IP's Headquarter Office with the data found in the field office (to determine accuracy).
3. **Assess the qualification of staff assigned to data collection, analysis and storage:**
  - Identify key persons in the M&E system that have direct or indirect relationship with the data collected.
  - Ask whether people assigned to data collection are fully trained or simply aware of the existence of the official data collection methodology provided by the DO hand book or by the PIRS.
4. **Assess the data storage systems:**
  - Review the electronic files and make sure that passwords exist in order to access stored data.
  - Find out the number and the responsibilities of people authorized to access the data storage system.
  - Review the archived or stored files.
  - Assess the vulnerability of the electronic system in place (risk of massive loss of data for example).
5. **Conduct a field visit** to data sources to make sure you have a clear picture of challenges the IP encounter in the data collection process (visiting two data generating sites is recommended).
6. **Review data compliance** with the five data quality standards including validity, integrity, precision, reliability, and timeliness.
7. Complete the **DQA Checklist** for each indicator, and a DQA self-assessment should be filled in by the IP's M&E specialist.
8. **Prepare a short debriefing to the IP's field office:**
  - Schedule a 30-minute discussion with key personnel of the organization.
  - Discuss orally key findings with the IP.
  - Discuss options for capacity building or improving data quality.

The following issues may be found in the field (the list is not exhaustive):

- **Double counting:** this problem is frequently encountered. During the DQA, the DQA expert will help the IP on a case-by-case basis to reduce the pervasive effects of double counting on data validity.
- **Lack of data source documents:** IPs should be encouraged to track data from training sessions (through lists of participants or lists of beneficiaries).
- **Potential data manipulations:** During the DQA process, it will be worthwhile to assess the presence of implementers during data processing in the field office. Weak abilities of M&E staff in the field to monitor their programs could lead to potential data manipulations that would reduce data validity.

## PART III: NEXT STEPS AND POTENTIAL CHALLENGES

### HOW TO DRAFT A DQA REPORT?

1. **Draft the DQA report and share it with the IP:**
  - The report should:
    - Outline the overall approach and methodology used in conducting the DQA;
    - Highlight key data quality issues that are important for senior management; and,
    - Summarize recommendations for improving performance management systems.
  - The conclusion of the report should logically flow from the key findings.
  - The report should be no more than ten pages, including the DQA checklist, and focused on the most relevant findings.
  - The AOR/COR should ensure that the IP agrees with the final version of the report before sharing it with the Program Office.
  - Continue to follow up on recommendations during future site visits.
2. **Share the Final Version of the DQA report with the Program Office for official filing**
  - The Program Office will file DQAs conducted at the Mission. At any time, the PO should provide auditing teams with proof of Mission's compliance with Agency data quality standards. The official COR/AOR project files should also maintain DQA records.

### WHAT ARE THE FREQUENT CHALLENGES AROUND THE DQA PROCESS?

Usually, the DO team will be confronted with the issue of finding out the best approach for conducting DQAs (i.e. informal, semi-formal, or formal DQAs). Figure 1 below presents a spectrum of informal, semi-formal, and formal DQA options.

**Informal options:** Informal approaches can be driven by specific issues as they emerge. These approaches depend more on the program manager's in-depth knowledge of the program. Findings are documented by the program manager in memos or notes in the Performance Management Plan.

Figure 1. Options for Conducting Data Quality Assessments- The Continuum



**Example:** An implementer reports that civil society organizations (CSOs) have initiated 50 advocacy campaigns. This number seems unusually high. The project manager calls the Implementer to understand why the number is so high in comparison to previously reported numbers and explores whether a consistent methodology for collecting the data has been used (i.e., whether the standard of reliability has been met). The project manager documents his or her findings in a memo and maintains that information in the files. Informal approaches should be incorporated into Mission systems as a normal part of performance management.

#### Advantages

- Managers incorporate data quality as a part of on-going work processes.
- Issues can be addressed and corrected quickly.
- Managers establish a principle that data quality is important.

#### Disadvantages

- It is not systematic and may not be complete. That is, because informal assessments are normally driven by more immediate management concerns, the manager may miss larger issues that are not readily apparent (for example, whether the data are attributable to USAID programs).
- There is no comprehensive document that addresses the DQA requirement.
- Managers may not have enough expertise to identify more complicated data quality issues, audit vulnerabilities, and formulate solutions.

#### Semi-Formal Options/Partnership options

Semi-formal or partnership options are characterized by a more periodic and systematic review of data quality. These DQAs should ideally be led and conducted by USAID staff. One approach is to partner a monitoring and evaluation (M&E) expert with the Mission's DO team to conduct the assessment jointly. The M&E expert can organize the process, develop standard approaches, facilitate sessions, assist in identifying potential data quality issues and solutions, and may document the outcomes of the assessment. This option

draws on the experience of DO team members as well as the broader knowledge and skills of the M&E expert. Engaging program managers in the DQA process has the additional advantage of making them more aware of the strengths and weaknesses of the data.

### **Advantages**

- Produces a systematic and comprehensive report with specific recommendations for improvement.
- Engages DO team members in the data quality assessment.
- Draws on the complementary skills of front line managers and M&E expert.
- Assessing data quality is a matter of understanding trade-offs and context in terms of deciding what data is “good enough” for a program. An M&E expert can be useful in guiding DO team members through this process in order to ensure that audit vulnerabilities are adequately addressed.
- Does not require a large external team.

### **Disadvantages**

- Requires time commitment from DO team members.
- The Mission may use an internal M&E expert or hire someone from the outside. However, hiring an outside expert will require additional resources, and external contracting requires some time.
- Because of the additional time and planning required, this approach is less useful for addressing immediate problems.

### **Formal Options**

At the other end of the continuum, there may be *a few select* situations where Missions need a more rigorous and formal data quality assessment.

**Example:** A Mission invests substantial funding into a high profile program that is designed to increase the efficiency of water use. Critical performance data comes from the Ministry of Water, and is used both for performance management and reporting to key stakeholders, including the Congress. The Mission is unsure as to the quality of those data. Given the high level interest and level of resources invested in the program, a data quality assessment is conducted by a team including technical experts to review data and identify specific recommendations for improvement. Recommendations will be incorporated into the technical assistance provided to the Ministry to improve their own capacity to track these data over time. These types of data quality assessments require a high degree of rigor and specific, in-depth technical expertise

### **Advantages**

- Produces a systematic and comprehensive assessment, with specific recommendations.
- Examines data quality issues with rigor and based on specific, in-depth technical expertise
- Fulfills two important purposes, in that it can be designed to improve data collection systems both within USAID and for the beneficiary.

### **Disadvantages**

- Often conducted by an external team of experts, entailing more time and cost than other options.
- Generally less direct involvement by program managers.
- Often examines data through a very technical lens. It is important to ensure that broader management issues are adequately addressed.

## CONCLUSION

Conducting a DQA is an important exercise for CORs/AORs and allows them to fully understand the data they are reporting on. DO teams should invest efforts and time to understand the strengths and weaknesses of data that they report on.

Planning DQAs at the DO level and integrating them into planned field trips helps save financial resources, and is a rewarding exercise for USAID project managers. By planning ahead to conduct DQAs in the field, CORs/AORs can streamline the DQA process and tailor it to each activity's needs.

## ANNEX I: INITIAL DATA QUALITY ASSESSMENT INFORMATION SHEET

*Use this model for the initial DQA with an implementing partner. It is best that these interviews be conducted on the partner premises, to allow them to show you their systems, get relevant examples from their files, and so that you can conduct an initial spot check. This interview guide asks questions about the partner's data management systems, as well as about specific data they provide to USAID. This Data Quality Assessment format can take 3 – 4 hours, and has a moderate management burden on USAID staff, but is not a detailed review of data quality standards set by the ADS for partner data. It is recommended for an initial data quality assessment of the partner's systems, which should be followed up with a more intensive data quality review as needed.*

|  |  |
|--|--|
| <b>GENERAL INFORMATION</b>   |  |
| Name(s) of USAID Assessors   |  |
| Date of Interview  |  |
| Reason for Assessment  |  |
| <b>PARTNER INFORMATION</b>   |  |
| Name(s)  |  |
| Name of Organization   |  |
| Name of USAID Funded Activity  |  |
| <b>DATA COLLECTION AND REPORTING</b>   |  |
| Does your organization systematically monitor progress of its activities?  |  |
| If yes, describe the data collected: level (i.e. household, individual, individual, etc.); types i.e. nutrition, opinion, etc, frequency (i.e. annually) |  |
| Describe collection process: (i.e. Trip reports, surveys, internal reports, technical records, sub - grantee reports)                                    |  |
| And how the data is received by the partner main office:   |  |
| Do they have baseline data? If so, how was the data collected, and what is the baseline for the USAID- funded activity?                                  |  |

|  |  |
|--|--|
| Do they have targets for USAID - funded activities?  |  |
| If so, how were the targets set, and what are they?  |  |
| Describe how the partner organization monitors or plans to monitor USAID funded activities   |  |
| How does the partner organization evaluate progress and impact?  |  |
| <b>INTERNAL DATA MANAGEMENT ISSUES:</b>  |  |
| 1. Are there controls on access to database systems?   |  |
| 2. Do they cross-check data input ?  |  |
| 3. Do they use procedures to ensure quality of financial information?  |  |
| 4. Do they use procedures to ensure quality of financial information?  |  |
| 5. Do they train their data collectors?  |  |
| 6. Do they have a staff position responsible for data monitoring?  |  |
| <b>Roles and Responsibilities</b>  |  |
| 1. Data and name of USAID Staff to follow - up any recommended actions.  |  |
| 2. Date and name of next USAID staff spot check of partner data files  |  |
| 3. Date and name of next USAID staff field visit to observe activities   |  |
| 4. Date and name of independent organization expected to conduct survey or evaluation to ensure accuracy of data reporting (if needed) |  |

## ANNEX 2: DATA QUALITY ASSESSMENT CHECKLIST

Refer to this checklist when the Development Objective (DO) team conducts both initial and periodic data quality assessments. The full list does not have to be completed—the DO team may wish to identify the most critical data quality issues for formal or informal assessment.

|   |                          |                          |          |
|---|--------------------------|--------------------------|----------|
| <b>Name of Development Objective:</b>   |                          |                          |          |
| <b>Name of Intermediate Result</b> (if applicable):   |                          |                          |          |
| <b>Name of Performance indicator:</b>   |                          |                          |          |
| <b>Data source(s):</b>  |                          |                          |          |
| <b>Partner or contractor who provided the data</b> (if applicable):   |                          |                          |          |
| <b>Year or period for which the data are being reported:</b>  |                          |                          |          |
| <b>Is this indicator reported in the Annual Report?</b> (circle one) YES NO   |                          |                          |          |
| <b>Date(s) of assessment:</b>   |                          |                          |          |
| <b>Location(s) of assessment:</b>   |                          |                          |          |
| <b>Assessment team members:</b>   |                          |                          |          |
| <b>1. VALIDITY—Do the data adequately represent performance?</b>  |                          |                          |          |
|   | Yes                      | No                       | Comments |
| <b>Face Validity</b>  |                          |                          |          |
| ➤ Is there a solid, logical relation between the activity or program and what is being measured, or are there significant uncontrollable factors? | <input type="checkbox"/> | <input type="checkbox"/> |          |
| <b>Measurement Error</b>  |                          |                          |          |
| <i>Sampling Error</i> (only applies when the data source is a survey)   |                          |                          |          |
| ➤ Were samples representative?  | <input type="checkbox"/> | <input type="checkbox"/> |          |
| ➤ Were the questions in the survey/questionnaire clear, direct, easy to understand?   | <input type="checkbox"/> | <input type="checkbox"/> |          |
| ➤ If the instrument was self-reporting were adequate instructions provided?   | <input type="checkbox"/> | <input type="checkbox"/> |          |
| ➤ Were response rates sufficiently large?   | <input type="checkbox"/> | <input type="checkbox"/> |          |
| ➤ Has non-response rate been followed up?   | <input type="checkbox"/> | <input type="checkbox"/> |          |
| <i>Non Sampling Error</i>   |                          |                          |          |



|   |                          |                          |  |
|---|--------------------------|--------------------------|--|
| ➤ Is the data collection instrument well designed?  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Were there incentives for respondents to give incomplete or untruthful information?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are definitions for data to be collected operationally precise?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are enumerators well trained? How were they trained? Were they insiders or outsiders? Was there any quality control in the selection process?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Were there efforts to reduce the potential for personal bias by enumerators?  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>Transcription Error</b>  |                          |                          |  |
| ➤ What is the data transcription process? Is there potential for error?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are steps being taken to limit transcription error? (e.g., double keying of data for large surveys, electronic edit checking program to clean data, random checks of partner data entered by supervisors) | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Have data errors been tracked to their original source and mistakes corrected?  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ If raw data need to be manipulated to produce the data required for the indicator:  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are the correct formulae being applied?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are the same formulae applied consistently from year to year, site to site, data source to data source (if data from multiple sources need to be aggregated)?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Have procedures for dealing with missing data been correctly applied?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are final numbers reported accurate? (E.g., does a number reported as a “total” actually add up?)   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>Representativeness of Data</b>   |                          |                          |  |
| ➤ Is the sample from which the data are drawn representative of the population served by the activity?  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Did all units of the population have an equal chance of being selected for the sample?  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Is the sampling frame (i.e., the list of units in the target population) up to date? Comprehensive? Mutually exclusive (for geographic frames)  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Is the sample of adequate size?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| ➤ Are the data complete? (i.e., have all data points been recorded?)  | <input type="checkbox"/> | <input type="checkbox"/> |  |

|   |                          |                          |                 |
|---|--------------------------|--------------------------|-----------------|
| <b>Recommendations for improvement:</b>   |                          |                          |                 |
| <b>2. RELIABILITY—Are data collection processes stable and consistent over time?</b>  |                          |                          |                 |
|   | <b>Yes</b>               | <b>No</b>                | <b>Comments</b> |
| <b>Consistency</b>  |                          |                          |                 |
| ➤ Is a consistent data collection process used from year to year, location to location, data source to data source (if data come from different sources)?   | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| ➤ Is the same instrument used to collect data from year to year, location to location? If data come from different sources are the instruments similar enough that the reliability of the data are not compromised? | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| ➤ Is the same sampling method used from year to year, location to location, data source to data source?   | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| <b>Internal quality control</b>   |                          |                          |                 |
| ➤ Are there procedures to ensure that data are free of significant error and that bias is not introduced?   | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| ➤ Are there procedures in place for periodic review of data collection, maintenance, and processing?  | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| ➤ Do these procedures provide for periodic sampling and quality assessment of data?   | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| <b>Transparency</b>   |                          |                          |                 |
| ➤ Are data collection, cleaning, analyses, reporting, and quality assessment procedures documented in writing?  | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| ➤ Are data problems at each level reported to the next level?   | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| ➤ Are data quality problems clearly described in final reports?   | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| <b>Recommendations for improvement:</b>   |                          |                          |                 |

## ANNEX 3: DATA QUALITY SELF-ASSESSMENT (OPTIONAL)

*Note: This is to be completed by the Implementing Partner*

Partner: \_\_\_\_\_

Date: \_\_\_\_\_

Development Objective: \_\_\_\_\_

Intermediate Result: \_\_\_\_\_

USAID is seeking the views of Partners on the quality of the data they are collecting on their respective performance indicators. Additionally, USAID is attempting to assess the burden (in time and financial costs) of data collection on organizations. We appreciate your response to these questions.

### MANAGEMENT:

1. Does your organization systematically monitor progress towards results?  
If yes, describe the data collected by level (i.e. household, individual, etc.), method (i.e., survey, Government report), and type (i.e. nutrition, opinion, etc.).
2. Do you have baseline data?
3. If so, how was the data collected, and what is the baseline figure for your USAID-funded activity?
4. Do you have targets for USAID –funded activities?
5. If so, how were the targets set, and what are they?

### VALIDITY:

6. Do your IR indicators adequately measure what your program is doing?
7. Do you consider these indicators a direct or proxy measure of performance?

### RELIABILITY:

8. Do you expect to be able to collect data on your indicator(s) in a consistent manner over the life of your program? Please discuss.
9. What procedures or mechanisms are in place to assure data consistency?

### TIMELINESS:

10. How frequently do you plan to collect indicator data on your program? How frequently will you be reporting data findings to USAID?
11. Aside from meeting USAID reporting requirements, will this frequency be sufficient to serve your management needs (i.e., making informed decisions)?

**PRECISION:**

- 12. How well do the data on your performance indicator(s) capture your program's performance?
- 13. Please estimate the "margin of error" in your data collection procedures?

**INTEGRITY:**

- 14. Is there a staff member responsible for data collection and monitoring?
- 15. Are there controls to database systems?
- 16. Do you have procedures to ensure the quality of financial Information?
- 17. If yes, please describe.
- 18. Based on your program management experience, what extraneous factors play a role in the quality of the indicator data you are collecting?

**BURDEN:**

- 19. Please estimate the level of effort involved in collecting data on your respective IR indicator(s)
- 20. Percent of total program labor/FTEs (%)
- 21. Percent of total program budget (%)
- 22. Based on the amount of resources (time and/or money) used to report on your IR Indicator, please rate the burden this has placed on your organization. Please circle the value that best reflects your assessment of this burden.

|            |   |                 |   |             |
|------------|---|-----------------|---|-------------|
| 1          | 2 | 3               | 4 | 5           |
| Low Burden |   | Moderate Burden |   | High Burden |

- 23. Do these reporting requirements complement your overall project management activities?

**Please add any additional comments:**

## ANNEX 4: DQA STEPS

### DQA PROCEDURES IN THE FIELD

| #  | Element of DQA            | Task to Perform   | Observation   |
|----|---------------------------|---|---|
| 1  | Indicator's definition    | Check whether the definition is exhaustive or not taking the updated list of OP indicators  | See OP Guidance Annexes   |
| 2  | Data exactitude           | Compare data reported against data available in the field office  | Breakdown data using the channel displayed from the field to the M&E Office   |
| 3  | Collection methodologies  | <ul style="list-style-type: none"> <li>- Retrieve copies of data supporting a reasonable methodology</li> <li>- Check constancy of the methodology throughout the life time of the project</li> </ul> | Access (for pictures) to documents used for as primary source document. Methodology includes Means of Verification, timing of the process |
| 4  | Data Storage Conditions   | Check existence of archives/up – to – date, accessibility, and conditions of storage  | Review the quality of M&E folks, their organization and reporting frequency. Go back to previous couple of years                          |
| 5  | Evidence of Quality Check | See memos, decisions taken after site visits  | Who does what, where, and how   |
| 6  | Validity of indicator     | Verify whether the tool used to collect data is directly linked to the indicator  | The Indicator's performance should be attributable to the USAID   |
| 7  | Data Collection Schedule  | Check timelines of data collection and reporting  | Respect on not of the schedule  |
| 8  | Safeguards Existence      | What are the safeguards to prevent unauthorized changes to data collected   | Which persons have access to the data in the computer; use of files (electronic or in hard copy)  |
| 9  | DQA Report and Check list | Store DQA report in an official file and fill in the check list   |   |
| 10 | Sharing Report            | Sharing with Partners   |   |

## DQA ASSESSMENT OF DATA QUALITY STANDARDS

| # | Data Quality Standards | Definition   | Observation   |
|---|------------------------|--|---|
| 1 | <b>VALIDITY</b>        | Do the data clearly and directly measure what we intend                            | What do we want to measure or are there more direct ways to measure it? |
| 2 | <b>RELIABILITY</b>     | Using the same measurement procedures, can the same results be obtained repeatedly | Scientific and reproducible?  |
| 3 | <b>TIMELINESS</b>      | Are data sufficiently current, available to inform decision-making                 | Report confidently on Fiscal years and results                          |
| 4 | <b>PRECISION</b>       | Margin of error, what's acceptable given management decisions?                     |   |
| 5 | <b>INTEGRITY</b>       | Is there any data manipulation   | Who touched the data on its way to the M&E office; how was it stored?   |

## **ANNEX 5: FURTHER REFERENCES**

1. TIPS: Performance Monitoring and Evaluation, 2009, # 12, second edition.
2. TIPS: Conducting Data Quality Assessments, 2009, # 18, First Edition draft for USAID Review